

Title (en)  
ELECTRONIC DEVICE FOR TRANSMITTING SOUNDING REFERENCE SIGNAL IN WIRELESS COMMUNICATION SYSTEM AND OPERATING METHOD THEREOF

Title (de)  
ELEKTRONISCHE VORRICHTUNG ZUR ÜBERTRAGUNG EINES KANALREFERENZSIGNALS IN EINEM DRAHTLOSKOMMUNIKATIONSSYSTEM UND BETRIEBSVERFAHREN DAFÜR

Title (fr)  
DISPOSITIF ÉLECTRONIQUE POUR ÉMETTRE UN SIGNAL DE RÉFÉRENCE DE SONDAGE DANS UN SYSTÈME DE COMMUNICATION SANS FIL ET SON PROCÉDÉ DE FONCTIONNEMENT

Publication  
**EP 4213402 A3 20230816 (EN)**

Application  
**EP 23152285 A 20230118**

Priority  
• KR 20220007451 A 20220118  
• KR 20220077816 A 20220624

Abstract (en)  
An electronic device including a communication circuit configured to receive a reception signal including an interference signal, and to transmit a sounding reference signal (SRS) to a base station; and a control circuit comprising an interference estimation circuit configured to detect the interference signal in the reception signal, and a precoding matrix calculation circuit configured to generate an SRS precoding matrix corresponding to the SRS, based on a detection result obtained by the interference estimation circuit, wherein the control circuit is configured to control the communication circuit to transmit the SRS to the base station, and wherein the SRS is generated by multiplying a transmission signal by the SRS precoding matrix.

IPC 8 full level  
**H04B 7/0456** (2017.01)

CPC (source: EP US)  
**H04B 7/0456** (2013.01 - EP); **H04L 5/0051** (2013.01 - US); **H04L 25/03343** (2013.01 - US)

Citation (search report)  
• [Y] WO 2012018611 A1 20120209 - QUALCOMM INC [US], et al  
• [Y] US 2015215061 A1 20150730 - TSAI LUNG-SHENG [TW], et al  
• [XY] QUALCOMM INCORPORATED: "Views on SRS", vol. RAN WG1, no. Reno, Nevada, USA; 20161114 - 20161118, 13 November 2016 (2016-11-13), XP051176010, Retrieved from the Internet <URL:http://www.3gpp.org/ftp/Meetings\_3GPP\_SYNC/RAN1/Docs/> [retrieved on 20161113]

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA

Designated validation state (EPC)  
KH MA MD TN

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**EP 4213402 A2 20230719; EP 4213402 A3 20230816**; US 2023231684 A1 20230720

DOCDB simple family (application)  
**EP 23152285 A 20230118**; US 202318097944 A 20230117